



## Meteorological factors, aeroallergens and asthma-related visits in Kuwait: A 12-month retrospective study

**Author(s):** Qasem JA, Nasrallah H, Al-Khalaf BN, Al-Sharifi F, Al-Sherayfee A, Almathkouri SA, Al-Saraf H  
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### Abstract:

**BACKGROUND:** The increasing prevalence of asthma in many countries has been related to weather factors and aeroallergen concentrations, but this has not been studied in Kuwait. We evaluated the effect of meteorological factors and the occurrence of aerobiologicals on the number of asthma cases in Kuwait. **METHODS:** The number of daily asthma visits to the allergy center and emergency department at Al-Sabha Hospital for 1 year were examined on a monthly basis for correlation with major meteorological factors (temperature, relative humidity, rain, wind speed and direction). Spore and pollen counts were collected hourly. **RESULTS:** A total of 4353 patients received asthma treatment during the year. The highest pollen count was in the month of September with a maximum relative humidity of 47% and no precipitation, but with a high mean temperature of 39.7 degrees C. Pollen counts were higher in the late summer (September) and occurred with a high patient visit to the allergy center. Fungal spore counts were significantly higher in early winter (December). The high fungal spore count seemed related to with high relative humidity and high precipitation with a low mean average temperature of 19.7 degrees C. The increase number of patients with bronchial asthma visiting an emergency clinic during December was significantly associated with high aerial counts for fungal spores (P

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### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Meteorological Factors, Meteorological Factors, Precipitation, Temperature

**Air Pollution:** Allergens

**Temperature:** Fluctuations

#### Geographic Feature:

resource focuses on specific type of geography

Desert

#### Geographic Location:

# Climate Change and Human Health Literature Portal

resource focuses on specific location

Non-United States

**Non-United States:** Asia

**Asian Region/Country:** Other Asian Country

**Other Asian Country:** Kuwait

**Health Impact:** ☒

specification of health effect or disease related to climate change exposure

Respiratory Effect

**Respiratory Effect:** Asthma

**Resource Type:** ☒

format or standard characteristic of resource

Research Article

**Timescale:** ☒

time period studied

Time Scale Unspecified